

REMARKS

Claims 8-13 are pending in the present application. Claims 1-5 have been canceled, and rewritten as claims 9-13. Claim 8 has been amended in this response. No new matter has been introduced as a result of the amendments.

Claims 3-5 were objected to for informalities. In light of the present amendments, Applicants submit the objections have been overcome. Withdrawal of the objections is respectfully requested.

Claims 1-2, 5, 8 and 9 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Sridhar* (US Patent No. 5,778,188) in view of *Liu et al.* (US Patent No 6,208,443). Claims 3 and 4 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Sridhar* (US Patent No. 5,778,188) in view of *Liu et al.* (US Patent No 6,208,443), and further in view of Fatehi et al. (US Patent No. 6,519,064). Applicant traverses these rejections. Favorable reconsideration is respectfully requested.

Specifically, the cited art, alone or in combination, does not disclose “a grating filter, operating as a bandstop filter on an optical signal connected in series with said first coupler; wherein a first input of said grating filter is connected to said first output of said first coupler, said grating filter being tuned to a wavelength of the outgoing optical signal to be launched, such that an incoming optical signal having this wavelength is reflected, and incoming signals having all other wavelengths are passed at an output, said grating filter further operating as a second optical coupler having an add input into which said outgoing optical signal to be launched is fed against its transmission direction, reflected, and added to said passed signals and transmitted” as recited in claim 9, and similarly recited in amended claim 8. Support for the amendments may be found in FIG. 3 and accompanying text in the present application. Novel aspects of the claims include the features that the grating filter and optical coupler operate as a single component, efficiently allowing data to be dropped and inserted into the optical ring network including the network nodes in light of wavelength changes.

In contrast, *Sridhar* discloses in FIG. 1, an optical filter 40 which is made up of a plurality in-fiber Bragg gratings 42, 44, 46, and 48 respectively configured to reflected optical wavelengths λ_1 , λ_2 , λ_3 and λ_4 , to prevent these optical wavelengths from being transmitted to second optical coupler 30 and further downstream onto optical transmission path 12. The remaining optical wavelengths comprising the input wavelength division multiplexed optical

signal are carried by optical path 50 to second optical coupler input port 32 (col. 5, lines 2-10). *Sridhar* does not disclose the optical filter operating as a second optical coupler having an add input into which said outgoing optical signal to be launched is fed against its transmission direction, reflected, and added to said passed signals and transmitted as required in the present claims. *Sridhar* teaches that the add-drop multiplexers for wavelength division multiplexed optical communication systems in which the channels which are dropped can optionally be different from the channels which are added and different from the channels which are selected in the demultiplexer (col. 3, lines 5-20).

Liu does not solve the deficiencies of *Sridhar* for the reasons argued in the Response dated December 29, 2004. While *Liu* teaches a WDM system used in a optical unidirectional ring network, the configuration in *Liu* does not teach the grating filter operating as a bandstop filter and coupler, and further does not disclose an add input into which said outgoing optical signal to be launched is fed against its transmission direction, reflected, and added to said passed signals and transmitted. Accordingly, is respectfully submitted that the rejection under 35 U.S.C. §103 is improper and should be withdrawn. For the same reasons argued herein, the rejection as to claims 3 and 4 must fall as well.

In light of the above amendments and arguments, Applicant respectfully submits that independent claims 8 and 9, and all claims that depend directly or indirectly therefrom, are allowable over the prior art. Applicant also requests that a timely Notice of Allowance be issued in this case. Should there be any charges regarding this application, the Examiner is hereby authorized to charge Deposit Account 02-1818 for any insufficiency of payment.

Respectfully submitted,

BELL, BOYD & LLOYD LLC

BY



Peter Zura
Reg. No. 48,196
P.O. Box 1135
Chicago, Illinois 60690-1135
Phone: (312) 807-4208

Dated: July 19, 2005